



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,781	08/21/2003	Hideki Kusunoki	116876	6914

25944 7590 11/17/2004

OLIFF & BERRIDGE, PLC
P.O. BOX 19928
ALEXANDRIA, VA 22320

EXAMINER

GIBSON, ERIC M

ART UNIT	PAPER NUMBER
----------	--------------

3661

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/644,781	Applicant(s) KUSUNOKI ET AL.	
	Examiner Eric M Gibson	Art Unit 3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 17-29 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/21/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The IDS filed 8/21/2003 lists a US application number as prior art. A co-pending US application is not a prior art document. If this application has been published, it should be listed as a Published US Application, including the Publication Number. Therefore, it has been crossed off the IDS (see attached).

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-10, 19, and 22-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Hardman et al. (US20020126005A1).

a. Per claim 1, Hardman teaches a wheel identification registration assisting apparatus including a plurality of wheel-identification-data registration assisting devices, operable when located close to the wheels, to assist the system in at least a portion of the operation associated with the registration of the information corresponding to wheel identification data in a body-side device (R/T unit 30, figure 1A, plurality taught at page 3, [0060] lines 4-5) and an assisting device control device operable to control the plurality of wheel-identification-data registration assisting devices (RP unit 32, figure 1A).

b. Per claim 2, Hardman teaches that the wheel-identification-data registration assisting devices includes at least one of a registration assisting portion and a data-inspection assisting portion (page 3, [0058]).

c. Per claim 3, Hardman teaches a transmission-command portion for commanding the wheel-side devices to transmit the wheel identification information (interrogation mode, page 6, [0087]).

d. Per claim 4, Hardman teaches an indicator portion to supply at least one of wheel identification data and information indicating the reception of the wheel-identification data (page 9, [0139]).

e. Per claim 5, Hardman teaches a wheel-identification-data supply portion operable to supply the body-side device with the wheel-identification data (page 9, [0139]).

f. Per claim 6, Hardman teaches a registration-assisting portion operable to assist the body-side device register the wheel identification data (page 9, [0140]).

Art Unit: 3661

g. Per claim 7, Hardman teaches an inspection assisting portion to assist the body-side device inspect the wheel identification data (page 8, [0120]).

h. Per claim 8, Hardman teaches a transmission-command portion for commanding the wheel-side devices to transmit the wheel identification information (interrogation mode, page 6, [0087]).

i. Per claim 9, Hardman teaches that the wheel-side devices transmit a signal (page 6, [0088]).

j. Per claim 10, Hardman teaches adjusting one of an intensity and a reception sensitivity of the signal (page 11, [0157]).

k. Per claim 19, Hardman teaches that the plurality of wheel-side devices include a wheel-state detecting portion (18, figure 1A) and a wheel-side information transmitting device (21, figure 1A) and that the body-side device includes an information receiving device (49, figure 12), a memory for storing information corresponding to the wheel identification data and a wheel-state obtaining portion operable to obtain the state of each wheel (page 9, [0139]).

l. Per claim 22, Hardman teaches a registration-state obtaining device operable to obtain a state of the operation of the body-side device associated with the registration of the information corresponding to the wheel identification data (page 9, [00138]).

m. Per claim 23, Hardman teaches that the registration assisting devices are operable to assist the system in at least a portion of a series of operation of the system from transmission of the wheel identification data from a corresponding one of the

Art Unit: 3661

plurality of wheel-side devices to the registration of the information corresponding to the wheel identification data in the body-side device (page 9, [0137]).

n. Per claims 24 and 25, Hardman teaches an inspection assisting portion to assist the body-side device inspect the wheel identification data (page 8, [0120]).

o. Per claim 26, Hardman teaches assisting the body-side device in checking if the information is correct (page 9, [0140]).

p. Per claim 27, Hardman teaches that the registration assisting devices are operable to assist the system in at least a portion of a series of operation of the system from transmission of the wheel identification data from a corresponding one of the plurality of wheel-side devices to the registration of the information corresponding to the wheel identification data in the body-side device (page 9, [0137]).

q. Per claim 28, Hardman teaches an identification-data registration assisting apparatus including an identification-data registration assisting device, operable when located close to the remote detecting device, to assist the system in at least a portion of the operation associated with the registration of the information corresponding to identification data in an information processing device (R/T unit 30, figure 1A) and an assisting device control device operable to control the identification-data registration assisting device (RP unit 32, figure 1A).

r. Per claim 29, Hardman teaches a data-processing-identification registration assisting apparatus including an identification-data registration assisting device, operable when the vehicle is located at a predetermined position (page 6, [0088]), to assist the system in at least a portion of the operation associated with the

Art Unit: 3661

registration of the information corresponding to the identification data in an information processing device (R/T unit 30, figure 1A) and an assisting device control device operable to control the registration assisting device (RP unit 32, figure 1A).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 11-15, 17, 18, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hardman in view of LeMense (US006441727B1).

a. Per claims 11-14, 20, and 21, Hardman teaches the invention as explained in the rejection of claims 1 and 9. Hardman does not teach a wheel-adjusting device that allows the signal-transmitting portion to be rotated. LeMense teaches an

Art Unit: 3661

arrangement and method of vehicle tire identification that includes using a hoist or similar arrangement to spin the tire in order to reprogram the identification data in the main ECU of the vehicle (column 4, lines 24-67). It would have been obvious to one of ordinary skill in the art, at the time of invention, to include a wheel-adjusting device that allows the signal-transmitting portion to be rotated in the system of Hardman, in order to reprogram the identification data in the main ECU of the vehicle, as taught by LeMense.

b. Per claims 15, 17, and 18, LeMense teaches that the system includes a supporting device (column 4, lines 45-47) that allows the tires to be rotated.

Allowable Subject Matter

5. Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

a. Per claim 16, the prior art does not teach or reasonably suggest in combination the present wheel-identification-data-registration assisting apparatus wherein the supporting device includes a main body, a movable member which supports each of the plurality of wheel-identification-data registration assisting devices, and a positioning device operable to move the movable member and thereby moving each wheel-identification-data registration assisting device toward and away from each other as claimed.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dixit et al. (US006441728B1) teaches a tire condition sensor communication with tire location provided via vehicle-mounted identification units. Takamura et al. (US006430484B1) teaches a vehicle wheel information supply device which supplies smaller data set earlier than larger data set. Dixit et al. (US006414592B1) teaches a tire condition sensor communication with tire location provided via manually inputted update. Takamura et al. (US006275148B1) teaches a vehicle wheel information supply device and wheel tire abnormality indicating device. McLaughlin et al. (US006243007B1) teaches a tire condition monitoring system. Mock et al. (US005602524A) teaches a device for monitoring the air-pressure in pneumatic tires fitted on vehicle wheels. Handfield et al. (US005473938A) teaches a method and system for monitoring a parameter of a vehicle tire.

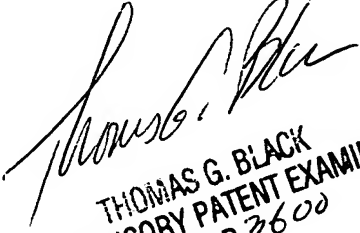
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric M Gibson whose telephone number is (703) 306-4545. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (703) 305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3661

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EMG


THOMAS G. BLACK
SUPERVISORY PATENT EXAMINER
GROUP 3600